Applying Performance-based Approaches to Classroom Assessment and Evaluation

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What do we want students to know and do after we teach them language?

IS THIS OUR GOAL?

Focus Questions

- After you have taught a unit to your class, what do you want to know?
- Answer: What did they learn? What did they NOT learn?
- How do you find the answer to these questions?
- Answer: Through assessment and evaluation

What is Assessment?

- Assessment is the process of getting documented information that can be used to measure the knowledge and skills learned in a class
- Assessment can focus on the individual learner or the class, or both
- There are several assessment methods, including tests, projects, activities, etc.

So, What is evaluation?

- Assessment is the way to get information.
- Evaluation is determining what the information means
- Example: Every one of your students gets 100% on a test - that is the assessment.
- What does that show you? (Evaluation)
  - You are a great teacher?
  - Your students are geniuses?
  - Someone stole your answer sheet and sold it to the class?
  - The test was too easy?
- *NOTE: Some educators view evaluation as a part of assessment (See the ASCD Lexicon)*

Types of Assessment

- Assessment is often divided into the following distinctions
  - Formative and Summative
  - Objective and Subjective
  - Criterion-referenced and Norm-referenced
  - Informal and Formal

Summative and Formative

- **Summative assessment**: Done at the end of a lesson, unit, or course to assign students a grade.
- **Formative assessment:** Done throughout a course and is used to aid teaching and learning. Formative assessment might be done by the teacher, a fellow student (peer), or the student. The goal is to provide information on a student's work, and is not necessarily used for grading.

Objective and Subjective

- Objective assessment is a type of questioning which has a single correct answer
  - Examples: true/false answers, multiple choice questions and matching questions
- Subjective assessment is a type of questioning that may have more than one correct answer, or more than one way of expressing the correct answer
  - Examples: extended-response questions and essays

Criteria-referenced and Norm-referenced

- **Criteria-referenced Assessment**: Measure how well a student has learned something without regard to how well other students have learned it – goal is to determine each student's achievement
- **Norm-referenced Assessment**: A student's performance is compared to how well students did – goal is to compare students with other students

Classroom tests are almost always criteria-referenced.

Ministry of Education tests are usually norm-referenced

Informal and Formal

- **Formal assessment:** Usually involves a written document, such as a test or paper. and is given a numerical score or grade
- **Informal assessment:** Occurs in a casual manner and may include observation, checklists, rating scales, performance demonstrations, portfolio assessments, participation, peer and self evaluation, and discussion.

Assessment Standards

- **Reliability**: A reliable assessment is one which a group of students consistently achieves the same results
  - Various factors affect reliability: poorly written questions, too many options within a question
- **Validity**: The assessment measures what it is intended to measure
  - If students were taught to recognize facts, but the test required them to remember facts, the assessment is not valid
- In practice, an assessment is rarely totally valid or totally reliable

Teacher Made Tests

- The majority of information gathered in summative evaluation comes from teacher-made tests
- Writing good tests is a skill that you must learn and practice if the examinations are to give information of any use to you or your students

Preparing Tests

- Developing a good test takes careful planning
- You must design the questions to measure the outcomes you established for a specific lesson
- It is essential that you test what you have taught, not something else

FOR EXAMPLE

- An intended outcome for a vocabulary lesson in science might be:
- Recognizes the definition of the term *caustic*

  Each of the following is an invalid test item:
- Define *caustic* in your words
- Use *caustic* in a sentence
- What is an antonym for *caustic?*

WHY ARE THESE ITEMS INVALID?

What are valid items for this outcome?

- *Caustic* means

  a. causing b. different c. acidic d. helpful
- Battery fluid is very *caustic.*

  a. acidic b. delicious c. diffused d. good
- Battery fluid is _____ and may burn you.

  diffused gentle caustic common
- Circle the word that means *caustic*

  The acidic fluid in the decrepit battery was painful to his uncovered hands.

EACH ITEM ONLY REQUIRES THE STUDENT TO RECOGNIZE THE MEANING

WHAT INTENDED OUTCOMES WOULD MATCH THESE ITEMS?

- Define *caustic* in your words
- Use *caustic* in a sentence
- What is an antonym for *caustic?*

Evaluating Teacher Made Tests

- An objective test (multiple-choice, true-false, short answer completion, matching) assesses by showing the number of correct and incorrect answers
- Objective tests can provide useful information on some areas of learning, but the results must be carefully evaluated
- Teachers (and administrators and parents) may rely too much on objective test scores

Example

Grade Scale: 100 – 90 = A, 89 – 80 = B, 79 – 70 = C, 69 – 60 = D, 59 – 0 = F

- Test Results

Student	T-1	T-2	T-3	T-4	AVG		GRD?
Amr Diab	97	95	96	95	96	=	A?
Haifa Wehbe	95	85	77	71	82	=	B?
Tamer Hosny	67	73	86	90	78	=	C?
Najwa Karam	91	88	10	90	69	=	D?
Nancy Ajram	59	57	58	58	58	=	F?

What do these scores really show?

- Did Amr Diab learn much, or did he already know the content before instruction?
- What can be seen in Haifa Wehbe's pattern of test scores?
- What can be seen in Tamer Hosny's pattern of test scores?
- Are Haifa Wehbe's and Tamer Hosny's grades accurate evaluations of achievement?
- What can be seen with Najwa Karam' scores? How do you evaluate her overall performance based on the Test 3?
- How would you evaluate Nancy Ajram's performance? What needs to be done?

Performance-based Assessment and Evaluation

- **Performance-based assessment and evaluation responds to the question: How do we determine what students have learned after instruction?**
- **The teacher determines where students "are" before instruction, establishes where they "should be" after instruction, and then plans the best way to get them from "before" to "after."**

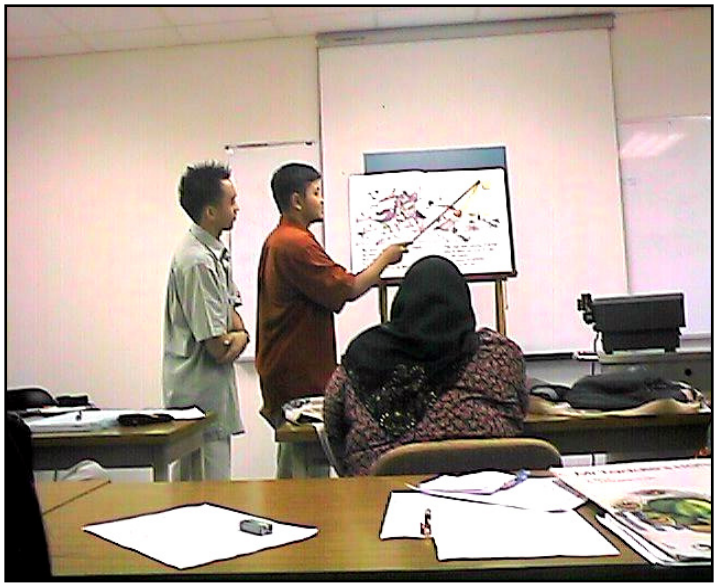
Establishing Performance Outcomes

Learning outcomes

specify *what* students are expected to learn

Performance indicators

specify how students *demonstrate* what they have learned



Establishing Performance-based Outcomes

Performance-based outcomes = **culminating demonstrations of significant learning in context (Spady, 1994)**

- **A *culminating demonstration* shows what a student can do after completing a learning activity.**
  - **The *demonstration* of learning must be in an appropriate *context (authentic learning)*.**
  - **In-seat classroom responses to a set of questions or working through a standardized test are NOT demonstrations of knowledge in an appropriate context.**
- **S*ignificant learning* refers to the quality of the instructional content. Simply recognizing or repeating discrete knowledge is not significant.**

Types of Knowledge

- **Declarative knowledge** = content information (display knowledge). When students know declarative information, they know **what.**
- **Procedural knowledge** = actions that must be performed in an operation. It is knowing **how**.
- **Conditional knowledge** refers to knowing **why** a given operation works and **when** to use one skill or action as opposed to another

The Tool Kit Analogy

A tool kit has several tools – hammer, screwdrivers, wrenches, etc.

- Declarative Knowledge – knowing what each tool is
- Procedural Knowledge – know how to use each tool
- Conditional Knowledge – knowing when and why to use a tool

Performance-based Assessment: Portfolios

- The fundamental principle of performance-based assessment is that students demonstrate what they learn rather than merely respond to exam questions.
- Two factors to ensure successful assessment
  - Establish realistic learning and performance outcomes
  - Establishing appropriate and effective evaluation standards for performance

Portfolio Assessment

- Definition = a systematically organized collection of evidence used to document a student's growth in knowledge, skills, and attitudes
- Documentation for portfolio assessment
  - *Classroom assignments and tests:* traditional teacher-made achievement measures
  - *Observation and anecdotal records:* observational notes, logs, and journals
  - *Checklists:* curriculum-based, observational guides, charts, and records
  - *Conferences:* face-to-face conversations to monitor student growth in language learning
- Both formal & nontraditional entries included, e.g. audio or videotapes of student demonstrations or independent writing samples

Common Portfolio Components

1. ***Rationale:*** **statement of purpose of the portfolio**
2. ***Goals*****: specification of expected performance outcomes**
3. ***Content:*** **documentary evidence of learning and performance**
4. ***Standards:*** **indicators of acceptable performance**
5. ***Evaluation:*** **what the content demonstrates about the student's learning**

- Portfolios are not a haphazard collection of papers and tests; they demonstrate the student's progress over a period of time
- Portfolios can be as simple as a single file folder for each student
- A portfolio can include items such as:
  - Examples of student's daily work
  - Work samples selected by the teacher and or student
  - Student self-evaluation report
  - Anecdotal records
  - Photographs of completed projects
  - Videotapes of student activities
  - Tests, quizzes, and/or exams

Using Portfolios for Assessment

- Before establishing portfolio, consider portfolio's purpose, what it will contain, how evidence will be selected, and criteria used for assessment
- Establish clearly defined and realistic performance outcomes
- Determine the teaching strategies necessary to assure that students can meet the performance outcomes

Using Portfolios for Assessment

- Include documentation that show processes used to demonstrate learning rather than only to record correct answers on assignments or tests
- Use embedded assessment to monitor understanding during teaching and to confirm that students are meeting both the content and performance standards during instruction

The Role of Traditional Assessment in Portfolios

Characteristics of a Useful Tests

- Significance: measures student attainment of a meaningful outcome
- Teachability: measures something that is teachable
- Describability: based on clearly stated learning outcomes so that the teacher can provide appropriate instructional activities
- Reportability: results provide specific information about the effectiveness of instruction
- Nonintrusiveness: should not take long to administer

Questions to Ask about Tests in Portfolios

- What strengths and weakness in student performance do the test results reveal?
- Are these the results that were expected? Why or why not?
- In what areas did the students perform best? What weaknesses were revealed?

Questions to Ask about Tests in Portfolios

- What do the results show about student learning and performance?
- What changes are seen over time?
- Is there evidence of improvement or decline? If so, what might have caused these changes?
- Are the test results consistent with the other assessment data in the portfolio?

Documentary Evidence Used in Portfolios

- Written samples, such as narratives, reports, recounts, or argument
- Tests and class assignments
- Student journals
- Videos and audiotapes
- Computer work
- Collaborative projects

Importance of Embedded Assessment

- **Embedded assessment** = monitoring student understanding during teaching to confirm that students are meeting both the content and performance standards before continuing on.
- Embedded assessment helps the teacher to
  - discover as much as possible about each student,
  - establish starting points or modifications for teaching
  - develop effective classroom teaching procedures.
- By using embedded assessment, teachers can monitor their students' learning progress and determine which students are showing progress and which students have having difficulties before final assessments

Factors Associated with Performance-based Instruction and Assessment

- **High expectations of student achievement (*Students are more successful when teachers expect them to succeed than if they expect them to fail*)**
- **Time engaged on task (*Students learn more when given adequate time to learn*)**
- **Closeness of the content to assessment (*Students show better results when they are tested on what they have been taught*)**
- **Focus on student needs (*Students perform better when teaching is based on what a learner requires rather than the number of lessons completed*)**

- **Embedded Assessment**

  (Students show better results if they have been given corrective feedback during instruction)

- **Flexible learning activities**

  (Students succeed more with innovative instruction than with routine assignments)

- **Students are actively involved in learning**

  (Students who actively participate in class perform better than those who passively complete assignments)

- **Teachers believe they can make a difference**

  (Teaching effectiveness is increased when teachers perceive themselves as decision makers rather than as technicians)

Organizing Instruction for Performance-based Assessment

To use maximum learning time and focused teaching, it is necessary to ensure that:

- The class is organized around the learning needs of students rather than completion of a given number of instructional units
- Adequate time is allocated for essential learning related to both content and performance standards, and that this time is free from external interruptions,
- Resources are allocated to support the instructional program, and
- Students who experience problems in learning receive extra time and support

The Importance of Decision Making in Teaching

- **Decision-making teachers organize instruction to reduce complexities of learning**
- **They make decisions about teaching even when using prescribed procedures and materials.**
- **They view learning not as a series of routine skills but as part of a complex integrated process**
- **They know that positive attitudes are crucial to success**
- **They understand that successful learning is not a matter of getting "right answers," but of knowing how and why – and by doing**
- **They know that there are many ways to teach and learn**

CONCLUSION - THINK ABOUT THIS

These Two Classes are Working on the Same Task

Which Group is Learning More?